

APPROVED	C. . FIG.	
BY	CLASS	SUBCLASS
SPARTSMAN		

SECRET

1 ATTTTATTATTACCAATCTTATATAATATAATTAATAATTTCTCTTACAAAAATCTCTAATG 60
61 TTTTATACCTAATATATATATCTGGCTTGATCTACTTTGCACCTCCACTATTTGTTAAT 120
121 TTATTTTCACTATTTTAGGTGTAATATGAATTTGCAAAAAAATTTCTTATAACAACACTGCATT 180
M N C K K I L I T T A L
181 AATATCATTAATGTACTCTATTTCCAAAGCATAATCTTTTCTGATACTATACAAGATGGTAA 240
I S L M Y S I P S I S F S D T I Q D G N
241 CATGGTGGTAACTTCTATATATTAGTGGAAAGTATGTACCAAGTGTCTCACATTTTGGTAG 300
M G G N F Y I S G K Y V P S V S H F G S
301 CTTCTCAGCTAAAGAAGAAAGCAAAATCAACTGTTGGAGTTTGTGGATTAAACAATGATTG 360
F S A K E E S K S T V G V F G L K H D W
361 GGATGGAAGTCCAAATACTTAAGAATAAACACGCTGACTTTACTGTTCCAAACATATTCGTT 420
D G S P I L K N K H A D F T V P N Y S F
421 CAGATACGAGAACAATCCATTTCTAGGTTTGCAGGAGCTATCGGTACTCAATGGGTGG 480
R Y E N N P F L G F A G A I G Y S M G G
481 CCCAAGAAATAGAATTTCGAAATATCTTATGAAGCATTCGACGTAAAAAGTCCCTAATATCAA 540
P R I E F E I S Y E A F D V K S P N I N
541 TTATCAAAAATGACGCGCACAGGTACTGCGCTCTATCTCATCACACATCGGCAGCCATGGA 600
Y Q N D A H R Y C A L S H H T S A A M E
601 AGCTGATAAAATTTGCTTCTTAAAAAACGAAGGGTTAATTGACATATCACTTGCAATAAA 660
A D K F V F L K N E G L I D I S L A I N
661 TGCATGTTATGATATAATAAATGACAAAAGTACCTGTTTCTCCTTATATATGCGCAGGTAT 720
A C Y D I I N D K V P V S P Y I C A G I

Fig. 1A

721 TGGTACTGATTGATTCTATGTTTGAAGCTACAAGTCCTAAAAATTTCCCTACCAAGGAAA 780
G T D L I S M F E A T S P K I S Y Q G K

841 CAGGATCATAGGTAATGAGTTTAGAGATATTCCTGCAATAGTACCTAGTAACTCAACTAC 900
R I I G N E F R D I P A I V P S N S T T

901 AATAAGTGGACCAAAATTTGCAACAGTAACACTAAATGTGTGTCACTTTTGGTTTAGAACT 960
I S G P Q F A T V T L N V C H F G L E L

961 TGGAGGAAGATTAACTTCTAAATTTTATGTGTGCCACATATTAATAATGATCTAAACTTG 1020
G G R F N F (SEQ. ID NO: 2)

1021 TTTTAWTATTGCTACATACAAAAAAGAAAAATAGTGGCAAAAAGAAATGTAGCAATAAGA 1080
1081 GGGGGGGGGACCAAAATTTATCTTCTATGCTTCCCAAGTTTTTTCYCGCTATTTATGA 1140
1141 CTTAAACAAACAGAGGTAATATCTCAGGAAAACTTATCTTCAAAATATTTTATTTATTA 1200
1201 CCAATCTTATATAATATAATTAATTTCTCTTACAAAAATCACTAGTATTTTATACCAAAA 1260
1261 TATATATTCTGACTTGCTTTTCTTCTGCACTTCTACTATTTTAAATTTTGTCACTAT 1320
1321 TAGGTTATAATAAATGAATTGCMAAAGATTTTTCATAGCAAGTGCAATGATATCACTAA 1380
1381 TGTCTTTCTTACCTAGCGTATCTTTTCTGAATCAATACATGAAGATAATATAAATGGTA 1440
1441 ACTTTTACATTAGTGCAAAAGTATATGCCAAGTGCCCTCACACTTTGGCGTATTTTCAGTTA 1500
1501 AAGAAGAGAAAAACACAACAACTGGAGTTTTCGGATTAAAAACAAGATTGGGACGGAGCAA 1560
1561 CACTAAAGGATGCAAGCWGCAGCCACACAWTAGACCCCAAGTACAATG 1607

(SEQ ID NO: 1)

Fig. 1B

7-10-68 C. B. G.
B. J. S. S.

1

VR4

Fig. 3B

U.S. DEPARTMENT OF AGRICULTURE

6-7-73

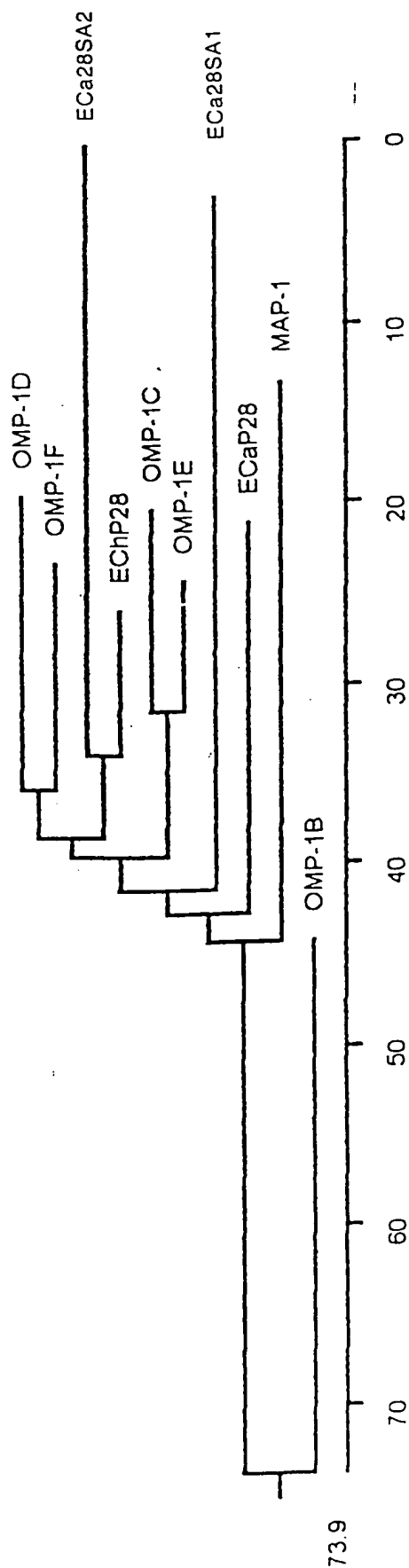


Fig. 4

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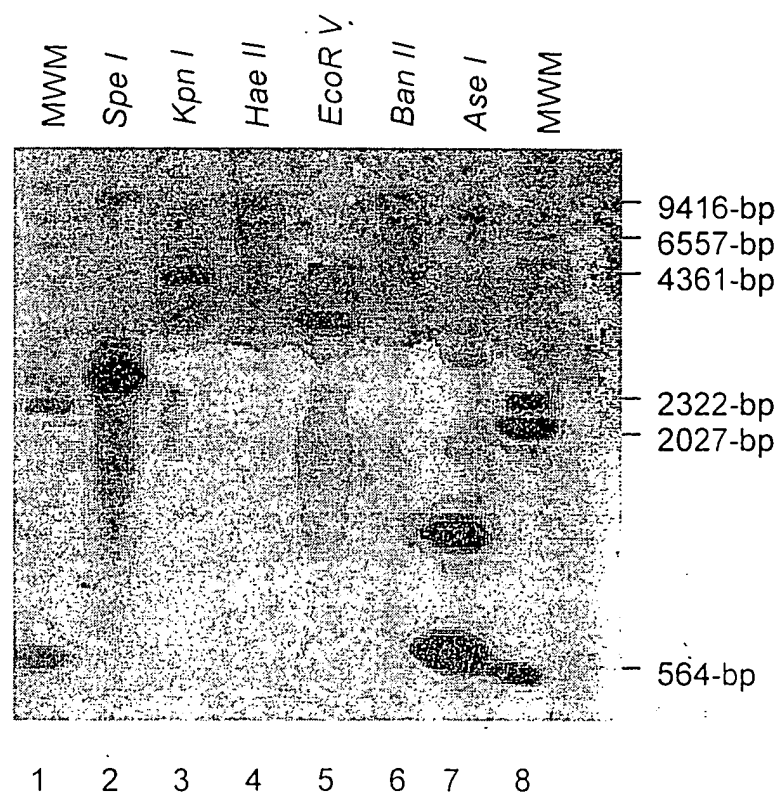
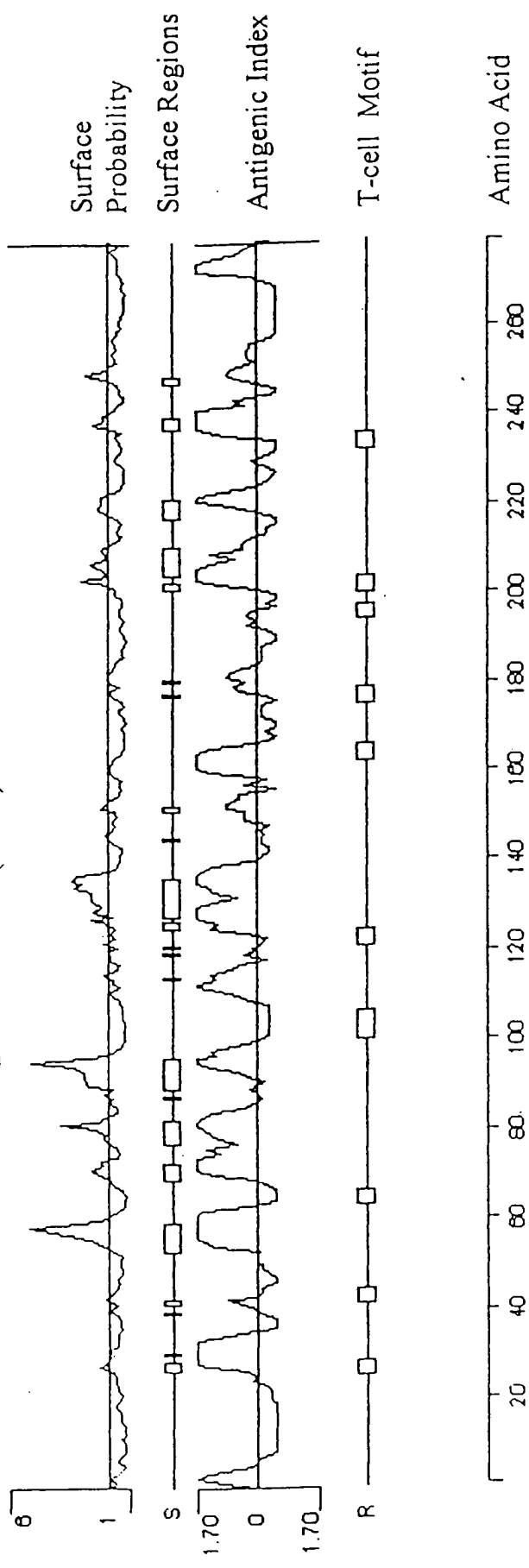


Fig. 5

E. canis P28 (Jake)



E. chaffeensis P28 (Arkansas)

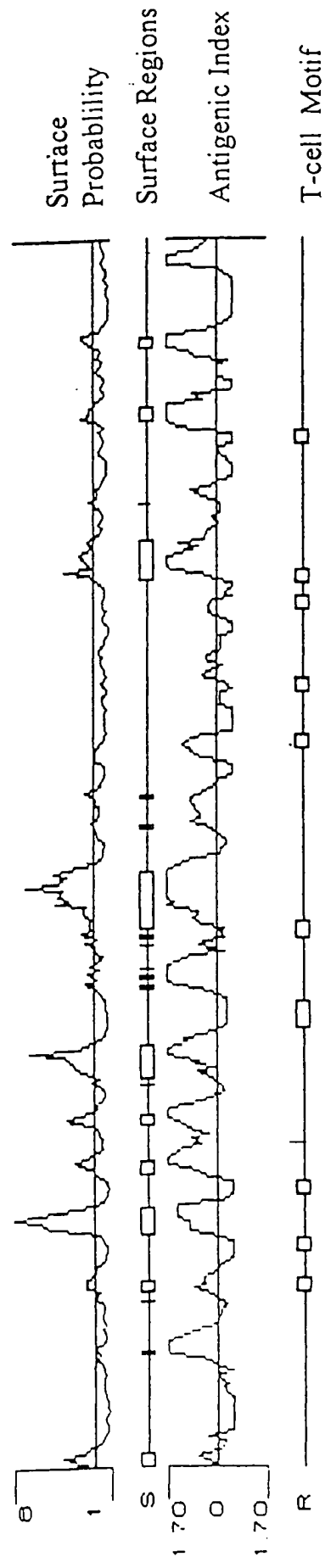


Fig. 6

Eca28SA2

ATGAAATTGTAATAAAGTTTTCACAAATAAGTGCAATGATATCATCCATATACTTCTACCT 60
 M N C K K V F T I S A L I S S I Y F L P

 AATGTCATACCTAACCAGTATATGGTAACAGTATGTATGGTAATTTTACATATCA 120
 N V S Y S N P V Y G N S M Y G N F Y I S

 GAAAGTACATGCCAAGTGTTCCTCATTTTGGAAATTTTTCAGCTGAAGAAGAGAAAAA 180
 G K Y M P S V P H F G I F S A E E K K

 AAGACAACTGTAGTATATGGCTTAAAGAAAACTGGCAGGAGATGCAATATCTAGTCAA 240
 K T T V V Y G L K E N W A G D A I S S Q

 AGTCCAGATGATAATTTTACCATTTCGAAATTTACTCATTTCAAGTATGCAAGCAACAAGTTT 300
 S P D D N F T I R N Y S F K Y A S N K F

 TTAGGGTTTGCAGTAGCTATTGGTTACTCGATAGGCAGTCCAAAGATAGAAAGTTGAGATG 360
 L G F A V A I G Y S I G S P R I E V E M

 TCTTATGAAGCATTTGATGTGAAAAATCCAGGTGATAATTACAAAAACGGTGCTTACAGG 420
 S Y E A F D V K N P G D N Y K N G A Y R

 TATTGTGCTTTATCTCATCAAGATGATCGGATGATGACATGACTAGTCAACTGACAAA 480
 Y C A L S H Q D D A D D D M T S A T D K

 TTTGTATATTTAATGAAGGATTACTTAACATATCATTTATGACAAACATATGTAT 540
 F V Y L I N E G L L N I S F M T N I C Y

 GAAACAGCAAGCAAAAATATACCTCTCTCTCTTACATATGTGCAGGTATTGGTACTGAT 600
 E T A S K N I P L S P Y I C A G I G T D

 TTAATTCACATGTTTGAAACTACACATCCCTAAAATTTCTTATCAAGGAAAGCTAGGGTTG 660
 L I H M F E T T H P K I S Y Q G K L G L

Fig. 7A

```

GCCTACTTCGTAAGTGCAGAGCTTCCGGTTCTTTGGTATATATTTTCATAAAATTATA 720
A Y F V S A E S S V S F G I Y F H K I I
AATAATAAGTTTAAATAATGTTCCAGCCATGGTACCTATTAACTCAGACGAGATAGTAGGA 780
N N K F K N V P A M V P I N S D E I V G
CCACAGTTTGCAACAGTAACATTAAATGTATGCTACTTTGGATTAGAACTTGGATGTAGG 840
P Q F A T V T L N V C Y F G L E L G C R
      (SEQ ID NO: 3)
TTCAACTTCTAAATTCGTGGTACACATATCACGAAGCTAAAATTGTTTTTTTATCTCTGTC 900
F N F * (SEQ ID NO: 4)
TGTATACAAGAGAAAAAATAGTAGTGAAAAATTACCTAAACAATATGACAGTACAAAGTTTAC 960
CAAGCTTATTCACAAAAACTTCTTGCTCTTTTATCTCTTTTACAATGAAATGTACACTT 1020
AGCTTCACTACTGTAGAGTGTTTATCAATGCTTTGTTTATTAATACTCTACATAATAT 1080
GTTAAATTTTCTTACAAAACTCACTAGTAATTATATACTAGAAATATATTTCTGACTTGT 1140
      (SEQ ID NO: 31)
ECa28SA3
ATTGTGCTTTATACTTCCACTATTGTTAATTTATTTTCACTATTTTAGGTGTAATATGAAT 1200
      M N
TGCAAAAAAATTCCTTATAACAACACTGCATTAATGTCAATTAATGTACTATGCTCCAAGCATA 1260
C K K I L I T T A L M S L M Y Y A P S I
TCCTTTTCTGATACATATAACAAGACGATAAACACTGGTAGCTTCTACATCAGTGGAAAAATAT 1320
S F S D T I Q D D N T G S F Y I S G K Y
GTACCAAGTGTTTCACATTTTGGTGTTTCTCAGCTAAAGAAGAAAGAACTCAACTGTT 1380
V P S V S H F G V F S A K E E R N S T V
GGAGTTTGTGGATTAAACATGATTGGAATGGAGGTACAAATATCTAACTCTTCTCCAGAA 1440
G V F G L K H D W N G G T I S N S S P E

```

Fig. 7B

AATATATTCACAGTTCAAAATTTATTCGTTTAAATACGAAAACAACCCATTCTTAGGTTT 1500
 N I F T V Q N Y S F K Y E N N P F L G F
 GCAGGAGCTATTGGTTATTCAATGGTGGCCCAAGAAATAGAACTTGAAGTTCTGTACGAG 1560
 A G A I G Y S M G G P R I E L E V L Y E
 ACATTTCGATGTGAAAAATCAGAACAAATAATTATAAGAACGGCGCACACAGATACTGTGCT 1620
 T F D V K N Q N N N Y K N G A H R Y C A
 TTATCTCATCATAGTTCAGCAACAAGCATGTCCTCCGCAAGTAACAAATTTGTTTTCTTA 1680
 L S H S S A T S M S S A S N K F V F L
 AAAAATGAAGGGTTAATTGACTTATCATTTATGATAAATGCATGCTATGACATAATAATT 1740
 K N E G L I D L S F M I N A C Y D I I I
 GAAGGAATGCCTTTTTCACCTTATATTTGTGCAGGTGTTGGTACTGATGTTGTTTCCATG 1800
 E G M P F S P Y I C A G V G T D V V S M
 TTTGAAGCTATAAAATCCTAAAAATTTCTTACCAAGGAAAACCTAGGATTAGTTATAGTATA 1860
 F E A I N P K I S Y Q G K L G L G Y S I
 AGTTCAGAAGCCTCTGTTTTTATCGGTGGACACTTTCACAGAGTCATAGGTAATGAATTT 1920
 S S E A S V F I G G H F H R V I G N E F
 AGAGACATCCCTGCTATGGTTCCTAGTGGATCAAAATCTTCCAGAAAACCAATTTGCAATA 1980
 R D I P A M V P S G S N L P E N Q F A I
 GTAACACTAAATGTGTGTCACCTTTGGCATAGAACTTGGAGGAAGATTAACTTCTGA 2031
 V T L N V C H F G I E L G G R F N F *
 (SEQ ID NO: 5)
 (SEQ ID NO: 6)

Fig. 7C

ECa28SA1 NC1 ECa28SA2 NC2 ECa28SA3 NC3 ECa28-1 NC4 ECa28-2

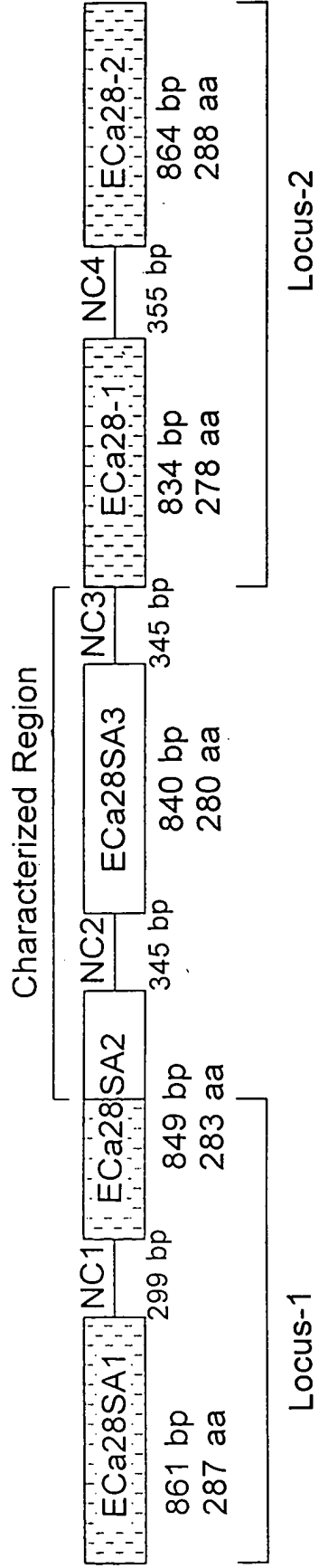


Fig. 8

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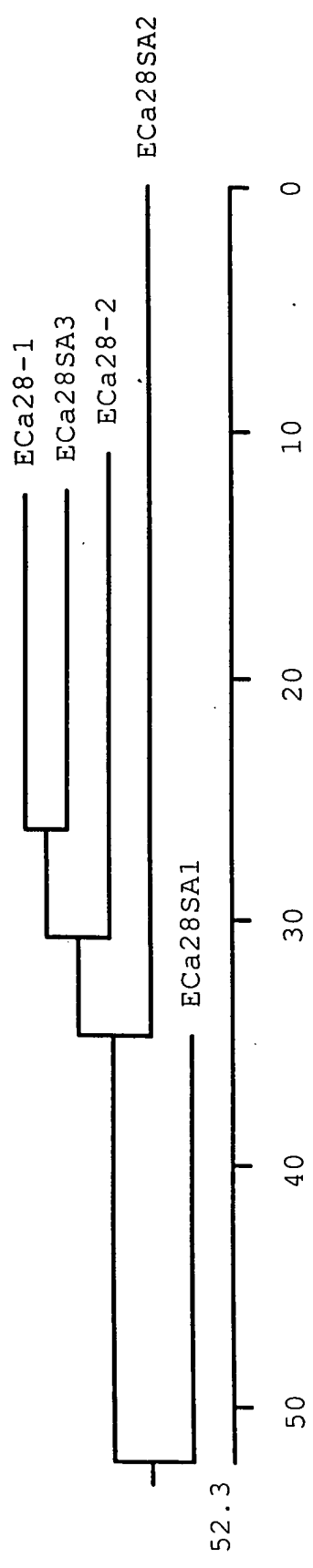


Fig. 9

1	TAATACTTCTATTGT-ACATGTTAAATAATAGTACTAGTTTCTGTGTT--TATAAACGCAAGAGAGAA--	28nc1
1	...TTCGTGG.A--C...A.C.CG..-GC..AA.T.G.TT..T.A.CTC.GC.G..T..AAG...A.A..TA	28nc2
1	.G..TT.AT.G...CC...A.....GA.CTA.AC...T..T.A.TA..GC..C.T..AA..A.A...AA	28nc3
1	...TT.AT.G...CC...A.....GA.CTA.AC...T..T.AWT.A..GC..C.T..AA..A.A...AA	28nc4
70	ATAGT-----TAGTAATAAATTAGAAAG-----TTAAA--TATT--AGAAAAGT-CA	28nc1
72	G...G--AAAATTACC..AC...TGAC..T.CAAGTTTACC..GCT...CTC.C...C.T.T	28nc2
75GGCAAAAGAATG...C...GAGG.GGG.GGGGAC...TT..CCTTC--T.TTC.T.T	28nc3
74GGCAAAAGAATG...C...GAGG.GGG.GGGGAC...TT...CTTC--T.TGC.T.C	28nc4
112	TATGTTTTTCATTGTCATTGAT-ACTCAACTA-----AAAGTAGTAT-----AAATGT-----	28nc1
136	.G...C...T..CTCT--T.CA.-G..A.-GTAC.-CT...CT.CACTACTGTAG.G...GTTTATCAATGC	28nc2
139	A..A..C..T--ACT..-----T...A..GCAC..CTC.A.GCTTCCA-GG-A...A.GT-TTCTAATAT	28nc3
138	C.A.....TCYC.CT...T..G...T..AC.ACAG..G...A...CCTCACGG-A...CT.ATCTTCAAATAT	28nc4
159	--TACTTATTAAATAAT-TTTACGTTAGTATATTAATTTCCCTTACAAAAGCCACTAGTATTTTATA	28nc1
205	TT.GT.....--C.C...A..A..G.....TT.....CT.....A.....	28nc2
202	TT..T.....CC...CC...TA..A.....T.....AT.T...A.G.....	28nc3
211	TT..T.....CC...C...TA..A.....T.....AT.....	28nc4
222	CTAAAAGC-TATACTTTGGCTTGTATTTAATTTGTATTTTACTACTGTTAATTACTT-TCACTGTT---TCT	28nc1
269	..T.G.ATA...T.C.A.....GC..A..C.CC...T.....T...A...A...A...TA	28nc2
268	..T..TATA...T.C.....C...C.C.CC...T.....T...A...A...A...TA	28nc3
276	.C...ATA...T.C.A...CT...CT.C.C.C.C.C...T.T.....T.G...A..AGG.TA	28nc4
-35		
292	GGTGTAAT 28nc1 (SEQ ID NO: 30)	
338 28nc2 (SEQ ID NO: 31)	
339 28nc3 (SEQ ID NO: 32)	
339	TA-A...-W 28nc4 (SEQ ID NO: 33)	
RBS		
-10		

Fig. 10

Fig. 11

U.S. PATENT OFFICE

CLASS	BY	CLASS	SUBCLASS

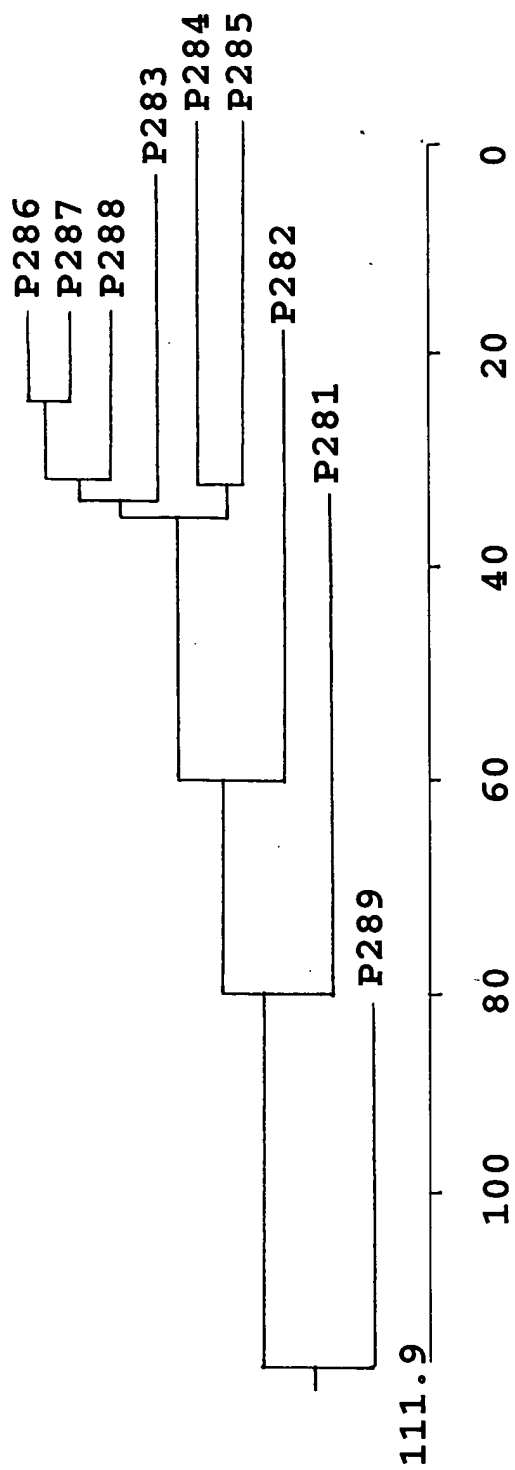


Fig. 12

10-10-85

ATGAATAATAAACTCAAATTTACTATAATAAACACAGTATTAGTATGCTTATTGTCATTA 60
M N N K L K F T I I N T V L V C L L S L

CCTAATATATCTTCCTCAAAGGCCATAAACAATAACGCTAAAAAGTACTACGGATTATAT 120
P N I S S S K A I N N N A K K Y Y G L Y

ATCAGTGGACAATATAAACCCAGTGTTTCTGTTTTTCAGTAATTTTTCAGTTAAAGAAACC 180
I S G Q Y K P S V S V F S N F S V K E T

AATGTCATAACTAAAAACCTTATAGCTTTAAAAAAGATGTTGACTCTATTGAAACCAAG 240
N V I T K N L I A L K K D V D S I E T K

ACTGATGCCAGTGTAGGTATTAGTAACCCATCAAATTTTACTATCCCCTATACAGCTGTA 300
T D A S V G I S N P S N F T I P Y T A V

TTTCAAGATAATTCTGTCAATTTCAATGGAACCTATTGGTTACACCTTTGCTGAAGGTACA 360
F Q D N S V N F N G T I G Y T F A E G T

AGAGTTGAAATAGAAGGTTCTTATGAGGAATTTGATGTTAAAAACCCTGGAGGCTATACA 420
R V E I E G S Y E E F D V K N P G G Y T

CTAAGTGATGCCTATCGCTATTTTGCATTAGCACGTGAAATGAAAGGTAATAGTTTTACA 480
L S D A Y R Y F A L A R E M K G N S F T

CCTAAAGAAAAAGTTTCTAATAGTATTTTTCACACTGTAATGAGAAATGATGGATTATCT 540
P K E K V S N S I F H T V M R N D G L S

ATAATATCTGTTATAGTAAATGTTTGCTACGATTTCTCTTTGAACAATTTGTCAATATCG 600
I I S V I V N V C Y D F S L N N L S I S

CCTTACATATGTGGAGGAGCAGGGGTAGATGCTATAGAATTCTTCGATGTATTACACATT 660
P Y I C G G A G V D A I E F F D V L H I

AAGTTTGCATATCAAAGCAAGCTAGGTATTGCTTATTCTCTACCATCTAACATTAGTCTC 720
K F A Y Q S K L G I A Y S L P S N I S L

TTTGCTAGTTTATATTACCATAAAGTAATGGGCAATCAATTTAAAAATTTAAATGTCCAA 780
F A S L Y Y H K V M G N Q F K N L N V Q

CATGTTGCTGAACTTGCAAGTATACCTAAAATTACATCCGCAGTTGCTACACTTAATATT 840
H V A E L A S I P K I T S A V A T L N I

GGTTATTTTGGAGGTGAAATTGGTGCAAGATTGACATTT (SEQ ID No. 39) 879
G Y F G G E I G A R L T F (SEQ ID NO. 40)

Fig. 13

ATGAATTATAAGAAAATTCTAGTAAGAAGCGCGTTAATCTCATTAAATGTCAATCTTACCA 60
M N Y K K I L V R S A L I S L M S I L P
TATCAGTCTTTTGCAGATCCTGTAGGTTCAAGAACTAATGATAACAAAGAAGGCTTCTAC 120
Y Q S F A D P V G S R T N D N K E G F Y
ATTAGTGCAAAGTACAATCCAAGTATATCACACTTTAGAAAATTCTCTGCTGAAGAACT 180
I S A K Y N P S I S H F R K F S A E E T
CCTATTAATGGAACAAATTCTCTCACTAAAAAAGTTTTTCGGACTAAAGAAAGATGGTGAT 240
P I N G T N S L T K K V F G L K K D G D
ATAACAAAAAAGACGATTTTACAAGAGTAGCTCCAGGCATTGATTTTCAAATAACTTA 300
I T K K D D F T R V A P G I D F Q N N L
ATATCAGGATTTTCAGGAAGTATTGGTTACTCTATGGACGGACCAAGAATAGAACTTGAA 360
I S G F S G S I G Y S M D G P R I E L E
GCTGCATATCAACAATTTAATCCAAAAACACCGATAACAATGATACTGATAATGGTGAA 420
A A Y Q Q F N P K N T D N N D T D N G E
TACTATAAACATTTTGCATTATCTCGTAAAGATGCAATGGAAGATCAGCAATATGTAGTA 480
Y Y K H F A L S R K D A M E D Q Q Y V V
CTTAAAAATGACGGCATAACTTTTATGTCATTGATGGTTAATACTTGCTATGACATTACA 540
L K N D G I T F M S L M V N T C Y D I T
GCTGAAGGAGTATCTTTCGTACCATATGCATGTGCAGGTATAGGAGCAGATCTTATCACT 600
A E G V S F V P Y A C A G I G A D L I T
ATTTTTAAAGACCTCAATCTAAAATTTGCTTACCAAGGAAAAATAGGTATTAGTTACCCT 660
I F K D L N L K F A Y Q G K I G I S Y P
ATCACACCAGAAGTCTCTGCATTTTATTGGTGGATACTACCATGGCGTTATTGGTAATAAA 720
I T P E V S A F I G G Y Y H G V I G N K
TTTGAGAAGATACCTGTAATAACTCCTGTAGTATTAAATGATGCTCCTCAAACCACATCT 780
F E K I P V I T P V V L N D A P Q T T S
GCTTCAGTAACTCTTGACGTTGGATACTTTGGCGGAGAAATTGGAATGAGGTTACCTTC 840
A S V T L D V G Y F G G E I G M R F T F
(SEQ ID No. 41)
(SEQ ID No. 42)

Fig. 14

SECRET

ATGAACTGTAAAAAATTCTTATAACAACTACATTGGTATCACTAACAATTCTTTTACCT 60
M N C K K I L I T T T L V S L T I L L P
GGCATATCTTTCTCCAAACCAATACATGAAAACAATACTACAGGAACTTTTACATTATT 120
G I S F S K P I H E N N T T G N F Y I I
GGAAAATATGTACCAAGTATTTTACATTTTGGGAACTTTTCAGCTAAAGAAGAAAAAAC 180
G K Y V P S I S H F G N F S A K E E K N
ACAACAACTGGAATTTTTGGATTAAAAGAATCATGGACTGGTGGTATCATCCTTGATAAA 240
T T T G I F G L K E S W T G G I I L D K
GAACATGCAGCTTTTAATATCCCAAATTATTCATTTAAATATGAAAATAATCCATTTT 300
E H A A F N I P N Y S F K Y E N N P F L
GGATTTGCAGGGGTAATTGGCTATTCAATAGGTAGTCCAAGAATAGAATTTGAAGTATCA 360
G F A G V I G Y S I G S P R I E F E V S
TACGAGACATTCGATGTACAAAATCCAGGAGATAAGTTTAACAATGATGCACATAAGTAT 420
Y E T F D V Q N P G D K F N N D A H K Y
TGTGCTTTATCCAATGATTCCAGTAAAACAATGAAAAGTGGTAAATTCGTTTTTCTCAA 480
C A L S N D S S K T M K S G K F V F L K
AATGAAGGATTAAGTGACATATCACTCATGTTAAATGTATGTTATGATATAATAACAAA 540
N E G L S D I S L M L N V C Y D I I N K
AGAATGCCTTTTTTACCTTACATATGTGCAGGCATTGGTACTGACTTAATATTCATGTTT 600
R M P F S P Y I C A G I G T D L I F M F
GACGCTATAAACCATAAAGCTGCTTATCAAGGAAAATTAGGTTTTAATTATCCAATAAGC 660
D A I N H K A A Y Q G K L G F N Y P I S
CCAGAAGCTAACATTTCTATGGGTGTGCACTTTCACAAAGTAACAAACAACGAGTTT 720
P E A N I S M G V H F H K V T N N E F R
GTTCTGTTCTATTAAGTCTGGAGGACTCGCTCCAGATAATCTATTTGCAATAGTAAAG 780
V P V L L T A G G L A P D N L F A I V K
TTGAGTATATGTCATTTTGGGTGTTAGAATTTGGGTACAGGGTCAGTTTT (SEQ ID No. 43) 828
L S I C H F G L E F G Y R V S F (SEQ ID NO. 44)

Fig. 15

ATGAATTACAAAAGATTTGTTGTAGGTGTTACGCTGAGTACATTTGTTTTTTTCTTATCT 60
 M N Y K R F V V G V T L S T F V F F L S

 GATGGTGCTTTTTCTGATGCAAATTTTCTGAAGGGAGGAGAGGACTTTATATAGGTAGT 120
 D G A F S D A N F S E G R R G L Y I G S

 CAGTATAAAGTTGGTATTCCCAATTTTAGTAATTTTTCAGCTGAAGAAACAATTCCTGGT 180
 Q Y K V G I P N F S N F S A E E T I P G

 ATTACAAAAAGATTTTTCGTTAGGTCTTGATAAGTCTGAGATAAATACTCACAGCAAT 240
 I T K K I F A L G L D K S E I N T H S N

 TTTACACGATCATATGACCCTACTTATGCAAGCAGTTTTGCAGGGTTTAGTGGTATCATT 300
 F T R S Y D P T Y A S S F A G F S G I I

 GGATATTATGTTAATGACTTTAGGGTAGAATTTGAAGGTTCTTATGAGAATTTTGAACCT 360
 G Y Y V N D F R V E F E G S Y E N F E P

 GAAAGACAATGGTACCCTGAGAATAGCCAAAGCTACAAATTTTTTGCTTTGTCTCGAAAT 420
 E R Q W Y P E N S Q S Y K F F A L S R N

 GCTACAAATAGTGATAATAAGTTTATAGTACTAGAGAATAACGGCGTTGTTGACAAGTCT 480
 A T N S D N K F I V L E N N G V V D K S

 CTTAATGTAAATGTTTGTATGATATTGCTAGTGGTAGTATTCCTTTAGCACCTTATATG 540
 L N V N V C Y D I A S G S I P L A P Y M

 TGTGCTGGTGGTGGTGCAGATTATATAAAGTTTTTAGGTATATCATTGCCTAAGTTTTCT 600
 C A G V G A D Y I K F L G I S L P K F S

 TATCAAGTTAAGTTTGGTGTCAACTACCCTCTAAATGTTAATACTATGTTGTTTGGTGGG 660
 Y Q V K F G V N Y P L N V N T M L F G G

 GGTTATTACCATAAGGTTGTAGGTGATAGGCATGAGAGAGTAGAAATAGCTTACCATCCT 720
 G Y Y H K V V G D R H E R V E I A Y H P

 ACTGCATTATCTGACGTTCCCTAGAACTACTTCAGCTTCTGCTACTTTAAATACTGATTAT 780
 T A L S D V P R T T S A S A T L N T D Y

 TTTGGTTGGGAGATTGGATTTAGATTTGCGCTA (SEQ ID No. 45) 813
 F G W E I G F R F A L (SEQ ID No. 46)

Fig. 16